

Economics 266 - Economics of Natural Resources (Fall 2016)

Instructor: Mark Jacobsen

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Office Hours: Mondays 4:00-5:00pm and by appointment, Economics 227

Class: Mondays and Wednesdays 9:30-10:50am, Economics 300

This course is an introduction to a broad range of topics and methods in natural resource and environmental economics. Within this outline we'll give particular attention to environmental regulation of industry, energy, transportation, and the economics of climate change. You may choose to focus on any aspect of resource or environmental economics in your written assignments, but I encourage you to talk with me outside class particularly if working on topics we cover only briefly.

Reading List

A limited number of required readings will be assigned each class (*) and a careful reading of them will help everyone gain much more from the discussion. I'm happy to direct you to additional papers on particular topics that interest you; feel free to come by my office hours or email me.

Assignments and Grades

i) Numerical policy simulation (due 10/26)

Develop a simulation of a simple environmental tax in a setting with pre-existing distortionary taxes. The first part of the assignment will be mainly on paper (working with a typical set of functions used to represent utility and production) and the second part will require using Matlab or similar for numerical simulations.

ii) Mock referee report (due 11/9)

A concise two-page referee report of a new working paper or journal article (papers will be assigned in class). It should include a brief summary of the methods and findings followed by a longer section (i.e. more than a page) critiquing the paper. Your critique can include potential problems with the method or assumptions that may be violated, suggestions for improvements in the presentation, and plausible extensions that would make the paper better.

iii) Research proposal and mini-presentation (written version due 12/2; presentations 11/28 and 11/30)

A proposal for a project that would contribute to the environmental economics literature. The written version will be the main graded component and should be in the range of 2500-5000 words. We will also have a series of short in-class presentations to gather comments and feedback.

iv) Class participation and reading report / presentation

In many of the class meetings I'll assign one student a short reading-group style presentation to concisely summarize one of the required papers and discuss key assumptions and possible extensions. Together with your overall contribution to class each week, this will also factor in to your grade (though with relatively low weight).

Topic Outline

(see reading list for detail)

9/26 Externalities, Pigouvian taxes

9/28 Tradable permits, prices vs. quantities

10/3 Trade, leakage, incomplete regulation

10/5 Dynamically updating policy: intensity standards, output-based updating

10/10 Optimal taxation and the second best (plus more detail on problem set)

10/12 Optimal taxation and the second best

10/17 Climate change

10/19 Climate change

10/24 Technological change

10/26 Transportation

10/31 Transportation

11/2 Transportation

11/7 Energy efficiency

11/9 Green preferences and behavior

11/14 Resource economics

11/16 Resource economics

11/21 Sustainability and development

11/23 *No class*

11/28 Presentations

11/30 Presentations

12/2 *Research proposal due*